

PATENT

ATTORNEY DOCKET NO.: D8202-00012

III. Remarks**A. Status of the Claims**

The Office Action Summary states that Claims 66-103 are pending in the present application. Applicants note that Claims 58-103 are pending in the present application, as evidenced by the substance of the Action beginning on Page 2 thereof. Correction in any subsequent Action or Notice of Allowance is requested.

Applicants are grateful to the Examiner for allowing Claims 91-103 and for recognizing the allowable subject matter of Claims 66-75, 83, 84 and 87-89.

Claims 58-65, 76-82, 85-86 and 90 are rejected. Reconsideration and withdrawal of the rejection of these claims are respectfully requested in view of the following arguments.

B. Rejection of Claims under 35 U.S.C. § 102

The Action rejects Claims 58-60, 63, 64, 77-82, 85, 86 and 90 as being anticipated by U.S. Patent No. 5,900,613 to Koziol et al. (Koziol). Initially, Applicants would like to note that Koziol is not prior art under §102(b), as it issued on May 4, 1999 and the present application claims priority back to EP98830665.0 filed November 2, 1998. Correction in any subsequent Action is respectfully requested.

For the following reasons, reconsideration and withdrawal of the rejection of these claims are respectfully requested.

1. Claim 58

Turning first to Claim 58, Claim 58 is directed to a device for acquisition of data obtained from optical codes. The device includes an image detector and a control unit for supplying at least one control signal for acquiring signals from the CMOS optical sensor of the image detector "according to a first configuration and at least one second configuration of pixels." The first configuration is suitable for acquiring a first type of optical code and the at least one second

PH1\1519815.1

13

PATENT

ATTORNEY DOCKET NO.: D8202-00012

configuration is suitable for acquiring a second type of optical codes different from the first type of optical code. The first and second configurations "are different one from the other at least in one of shape and a dimension of the respective pixels."

The Examiner concludes that Koziol teaches this claimed feature but fails to cite to any written description or figure in support of the contention other than microprocessor 42 and ASIC chip 44. The Examiner is requested to cite to specific support from Koziol in any subsequent action. As set forth hereafter though, Applicants have made a detailed review of the disclosure of Koziol and found no support or suggestion for the control unit feature of Claim 58.

Koziol describes a handheld scanner that has either a 1D or 2D CCD or CMOS image sensor (not both), neither of which is described as being configurable in any way. (See, e.g., Column 7, Lines 48-51; Column 9, Lines 13-17; Column 24, Lines 46-55). Koziol dedicates a significant part of its disclosure to a method of programming the control parameters of the handheld scanner. (See Column 12-21). In one embodiment, a new operating program can be downloaded to the scanner for control of the scanner operation. (Columns 19-21). In a different embodiment, called the "menuing" option, the parameter table of the scanner – the table that has specified values that define the mode in which the reader will operate – is programmed by scanning different menu elements shown in, for example, FIGS. 8A to 8D. For example, with respect to FIG. 8A, reading menu symbol 802 turns on the ability to read code 128, while reading menu symbol 804 turns off the ability to read code 128. In another example, codes 812-818 are used to select the baud rate of the device.

The actual scanning/decoding process of Koziol is described in connection with FIG. 6 and FIGS. 12-18. (Column 21, Lines 36-39). Referring to FIG. 6, steps 625 to 643 are performed in a loop until a successful decode is detected. If the reader is programmed with algorithms for decoding multiple kinds of codes (determined at step 643), the algorithms are run on a scanned image until a successful decode. (See, e.g., FIG. 6, steps 625, 627, 630, 643.) If the reader is not programmed to decode multiple types of codes and in the event of an unsuccessful decode, the scanner captures another image (e.g. a new scan line above or below

PHI\519815.1

14

PATENT

ATTORNEY DOCKET NO.: D8202-00012

the original scan line) and uses the decode algorithm again. (See FIG. 6, steps 643, 625, 627, 630; Column 29, Lines 31-42).

Koziol clearly uses different decoding algorithms that are either enabled or disabled depending upon the desired functionality of the reader. For example, certain decoding algorithms can be disabled to improve processing time when it is known in advance that certain codes will not be encountered. (Column 16, Lines 50-59) There is no discussion at all regarding different configurations of pixels for acquiring different types of optical codes where the configurations are different one from the other in at least one of shape and dimension of the respective pixels. It is submitted that the reader of Koziol uses the same configuration of pixels in its CMOS sensor for every scan regardless of the type of optical code, i.e., its 1D CMOS image scanner takes the same 1D image line each time (or an image line above or below the scanned line, but with the pixels still having the same shape and dimension for each scan) and its 2D CMOS image scanner takes the same 2D image each time. Once an image is already scanned, Koziol uses different decoding algorithms to deal with the possibility of encountering different codes captured by the scan.

Were Koziol to teach the claimed control unit that provides at least one control signal for acquiring codes according to first and second configurations of optical codes where the first and second configurations are different one from the other at least in one of shape dimension of the respective pixels, one would think that Koziol would include a detailed discussion of configuring pixels of a CMOS sensor. This, however, is not the case. Koziol mentions the word "pixel" on only two occasions in its entire 36 column disclosure. At Column 27, second full paragraph, Koziol states that the reader is either a 1D reader or a 2D reader (not both) and that if a 2D reader, "each pixel of the image sensor [is] . . . represented by an image data element that includes an 8 bit gray scale indication of its brightness." At the paragraph ending Column 28 and continuing into Column 29, Koziol discusses an interpolation procedure for producing a useably accurate representation of the image data along the scan line. Clearly, neither of these sections disclose nor suggest the control unit that acquires different optical codes using different

PHI\519815.1

15

PATENT

ATTORNEY DOCKET NO. : D8202-00012

configurations of pixels where the pixels are different one from the other at least in one of a shape and a dimension of the respective pixels of the configurations as claimed in Claim 58.

For at least these reasons it is submitted that Koziol clearly does not teach or suggest a device having the recited control unit for supplying at least one control signal for acquiring signals from the CMOS optical sensor according to the recited configurations suitable for acquiring different types of optical codes, and thus Claim 58 is not anticipated and is allowable over the art of record. Reconsideration and withdrawal of the rejection of Claim 58 are respectfully requested.

Claims 59-81 depend from Claim 58 and are, therefore, allowable for at least the reasons set forth above in connection with Claim 58.

2. Claim 82

The Action rejects Claim 82 as being anticipated by Koziol.

Claim 82 is also directed to a device for the acquisition of data obtained from optical codes. The device includes a CMOS optical sensor and "acquisition means for acquiring signals from said CMOS optical sensor according to a first configuration and at least one second configuration of pixels, said first configuration being suitable for acquiring a first type of optical code and said at least one second configuration being suitable for acquiring at least one second type of optical code different from the first type, and wherein said first and second configurations are different one from the other at least in one of shape and a dimension of the respective pixels." (emphasis added).

As discussed above, Koziol neither teaches nor suggests different configurations of pixels for acquiring different types of optical codes where the configurations are different one from the other in at least one of shape and dimension of the respective pixels. For at least this reason, it is submitted that Claim 82 is not anticipated by the cited reference and is allowable. Reconsiderations and withdrawal of this rejection are respectfully requested.

Claims 83-85 depend from Claim 82 and are, therefore, allowable for at least the reasons set forth in connection therewith.

PHI/1519815.1

16

PATENT

ATTORNEY DOCKET NO. : D8202-00012

3. Claim 86

The Action rejects Claim 86 as being anticipated by Koziol. Claim 86 is directed to a method for the acquisition of data obtained from optical codes and recites the step of "acquiring signals from said CMOS optical sensor according to a first configuration and at least one second configuration of pixels, said first configuration being suitable for acquiring a first type of optical code and said at least one second configuration being suitable for acquiring at least one second type of optical code different from the first type, and wherein said first and second configurations are different one from the other at least in one of shape and a dimension of the respective pixels."

As set forth above, Koziol neither teaches nor suggests different configurations of pixels for acquiring different types of optical codes where the configurations are different one from the other in at least one of shape and dimension of the respective pixels, nor acquiring signals using such configurations. For at least this reason, it is submitted that Claim 86 is not anticipated by the cited reference and is allowable. Reconsiderations and withdrawal of this rejection are respectfully requested.

Claims 87-90 depend from Claim 87 and are, therefore, allowable for at least the reasons set forth in connection therewith.

C. Claim Rejection under 35 U.S.C. § 103

The Action rejects Claims 61, 62, 65 and 76 as being obvious from Koziol. These claims depend from Claim 58 and are allowable for at least the reasons set forth above in connection with Claim 58.

Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

PATENT

ATTORNEY DOCKET NO.: D8202-00012

IV. Conclusion

In view of the foregoing remarks and amendments, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

Dated: 1-9-06


Joseph A. Powers, Reg. No.: 47,006
Attorney For Applicant(s)

DUANE MORRIS LLP
30 South 17th Street
Philadelphia, Pennsylvania 19103-4196
(215) 979-1842 (Telephone)
(215) 979-1020 (Fax)